
From: Kelly Wright [mailto:kwright@sbtribes.com]
Sent: Monday, September 29, 2014 1:26 PM
To: Meyer, Linda
Cc: susanh@ida.net; Virginia Monsisco
Subject: FW: Readily Implementable Interim Work Plans

Linda, here is some of the other comments that the Tribes provided on the Pond 18A RIWP.

From: Kelly Wright
Sent: Tuesday, April 16, 2013 11:05 AM
To: 'Weigel, Greg'; 'susanh@ida.net'
Cc: Virginia Monsisco; 'brian.english@deq.idaho.gov'; 'Fisher, Carla'; 'Boyd, Andrew'
Subject: RE: Readily Implementable Interim Work Plans

One more point that the Tribes would like to have considered is having soil gas concentrations evaluated before startup of the gas extraction system. This would be very beneficial for understanding if some assumptions for these ponds.

Thanks
Kelly

From: Kelly Wright
Sent: Tuesday, April 16, 2013 10:05 AM
To: 'Weigel, Greg'; susanh@ida.net
Cc: Virginia Monsisco; brian.english@deq.idaho.gov; Fisher, Carla; Boyd, Andrew
Subject: RE: Readily Implementable Interim Work Plans

Greg, one of your comments that you made this morning on the call was that you had not seen comments on Pond 18A from the Tribes. The attached email indicates that the Tribes comments were received for both ponds and you provided responses to them. As we discussed, the Tribes are concerned with a variety of issues. One of the them includes the fact that FMC has no respiratory protection program at their facility. Based on the concentrations that we are seeing at Pond 18A's perimeter piping, these concentrations clearly show that some respiratory protection should be required.

We also understand that EPA cannot enforce OSHA regulations but feel that it is imperative that FMC develop a more comprehensive worker protection program.

Operational experience is limited. EPA should realize that operational experience is what got us here in the first place. FMC manipulates their data so they can get their desired results. For example, in their Annual Reports for some of the earlier ponds, it specifically stated in the executive summary that no gas were being detected. However, in reviewing the actual document more thoroughly, it was clear that the phosphine concentration were decreasing but the hydrogen cyanide concentration were actually increasing to limits which were exceeding exposure limits. It is my opinion that operational experience should not be used but we should use sound scientific data to make rational decisions.

Tribes also understand that we are all learning as we proceed forward with accomplishing the primary objective of the unilateral agreement order which focuses on removing the imminent human health and environment threats. Some of the previous experiences learned from Pond 16S can be evaluated and possibly used at the other ponds with the understanding that these ponds are not identical so we should always remember that based on this fact alone, the ponds will and continue to react differently.

The Tribes fully understand that our primary focus with these UAOs is to eliminate threats and that many of these concerns should be focused in the post closure monitoring plan. This was one of the comments that you made during last week's conference call that I unfortunately missed. Hopefully, this will be the case that Andy and Carla will be working on and with the Tribes to ensure these concerns are adequately addressed.

I agreed that based on the current gas concentrations we are seeing at Pond 18A, that FMC should be doing some gas extraction treatment. Based on operational experience from some of the other ponds we see that these concentrations could and more than likely would increase. Tribes do not want to see any hazardous gases being generated at any of these ponds threatening human health or the environment.

If my understanding is incorrect, please let me know.

Thanks

Kelly

From: Weigel, Greg [<mailto:Weigel.Greg@epa.gov>]
Sent: Friday, April 12, 2013 2:38 PM
To: susanh@ida.net; Kelly Wright
Cc: Virginia Monsisco; brian.english@deg.idaho.gov; Fisher, Carla; Boyd, Andrew
Subject: RE: Readily Implementable Interim Work Plans

Kelly and Susan:

As I indicated earlier, thank you for the careful review and comments on the Pond 18A and 16S Interim Work Plans for Gas Extraction and Treatment. My responses to your comments are indicated below as insertions following each comment in your email. I will prepare a response to FMC with comments, consistent with my responses to your comments below:

3.2.3- I'm not sure the wisdom in manual control of this system. There are too many areas for human error- from adjusting the TMP gas flow, to adjusting the inlet air dilution, to measuring PH3 concentrations within the door of the carbon unit. Are there automatic valves that could be valves for adjusting? We understand there are automatic shutoffs, i.e. at the TMPS if eductor becomes too hot, et.

Response: We discussed with FMC the use of more fully automated systems during the initial design and approval process for the GETS under the RCRA Pond 16S UAO, and decided at the time on the current system utilizing a combination of automated shut down interlocks for exceedence of certain critical parameters, and manual control for tuning and optimizing the system. That system worked well enough during implementation of the 16S UAO, and I do not believe it would be prudent under this Interim Work Plan to require a re-design of

the interlock, feedback and control system that has already proved to operate successfully over the long term and at higher PH3 concentrations than we see at present.

3.3.1 Normal Operating Conditions- Does FMC report how many hours were normal operating vs non routine and what happened if non routine? The UAO reports operational performance- will this always include if the gas entering the primary unit is not at 300 ppm or if the tailgas exceeded .2ppm, or how many TMPs automatically shutoff?

Response: FMC is required to report discharges that exceed .3 ppm. With all of the other regular data we review on a monthly basis as required by the UAO and approved work plans, I am not interested in having to review regular operational performance monitoring data that is not critical, such as tailgas concentrations below the UAO threshold. I do agree that any automatic interlock shutdown should be reported in the “Unplanned Events” section of the weekly report.

3.3.2 Should be requiring Respiratory Program- SCBA and training for employees.

Response: When OSHA inspected they did not conclude that there was a need for a respiratory protection program, including SCBAs and training, at the Site. We did resolve certain other health and safety issues at the Site, including the need for an overall, umbrella, FMC site health and safety plan indicating that FMC had ultimate responsibility for worker health and safety at the site, not just each of their contractors individually. I will defer to OSHA on the need for a respiratory protection program at the Site, at least with respect to implementation of the required Interim Work Plans at Ponds 16S and 18A.

3.3.3 Remove nominal from first sentence. Anything about the IDHL- 50ppm is not nominal.

During Non- Routine Operating conditions FMC proposes to lower the extraction from TMP by 5x- to 100 ppm or turning of some TMPs- Is there a process for determining what TMPs to shut down?

Response: I agree that FMC should present a rationale for deciding which TMPs they would “shut off” and which would continue to extract during non-routine operation. I believe that this is not critical for implementation of the Interim Work Plan (particularly now with the onset of Spring and warmer temperatures), but should be a requirement for the subsequent Removal Action Work Plan.

I don't agree with shutting down all TMP extraction if the primary carbon vessel temperature drops below 40 degrees F- Is there a temperature regulator that could be installed in the primary carbon unit?

Response: Operational experience says that shutting down at below 40 degrees F in the primary carbon bed is necessary to avoid carbon bed fire. This is a necessary safety precaution. FMC switched the position of the fan to in front of the carbon bed in order to minimize the need for shutting down during extremely cold weather. I'm satisfied with that.

Air purging vs. N2 purging increases time of shutdown- a minimum of 4 hours purge time for air vs. ? for N2 purging. Can EPA ask FMC to keep records and report purge times at different temperatures? If the purge times with air becomes excessive ask to go back to N2. Does FMC keep enough Nitrogen on site in the event of fires?

Response: I agree that FMC should report N2 purge incidents, including purge times. I also agree that FMC should indicate how much N2 is required to implement the work plan, and how much is on site.

Second Bullet pg. 3-6 FMC may alter their purge- introduce N2 if the PH3 tailgas concentrations remain high. Define what this is. Anything over .3 for an hour, 2 hours, etc.

Response: I agree that FMC needs to specify this criteria.

Power Outage Procedures-

This amendment puts the operator at risk and the Tribes do not agree with shutting down the N2 purge in lieu of the operator monitoring the temperature at the carbon vessel if excessive heating or visible black smoke from the GETs stack. What is excessive? anything over 250? If the power outage is greater than 20 minutes the operator starts the generator for the fan and at least 4 hours of purging air- alot of down time and alot of manual adjustments required. If the operator is trying manually adjust all these sites during a non-routine operation who is monitoring the area?

Response: I agree that FMC should define “excessive heating.” I'm not so concerned about the down time for slow restart, as I believe that we should err on the side of caution considering our earlier experience with carbon

fire upon too fast of a restart. I believe that the operator is continuously monitoring the area with his personal hygiene PH3 meter and pre-set alarm levels.

Spent Carbon Management

Do we need parameters around the purge time? Not comfortable with based on operating experience- what is it 4 hours, 8 hours, 12 hours?

Response: FMC has significant operating history with the GETS including operating with much higher PH3 concentrations in Pond 16S than at present. I agree with FMC in allowing the operator to utilize his knowledge and experience with regard to appropriate purge time, provided it is a minimum of 4 hours.

TMP Auto ignition

Summer temperatures cause auto ignition in the eductor and the operator must manually control the valve at each TMP- I don't see how one operator can properly monitor all these TMPs and manually adjust if there is anything out of the ordinary. Are there automative valves that would bleed in Ph3 levels? The fail safes do not seem adequate- hoping the operator recognizes temperature increases - or the TMP shuts off and they get to it when they can.

Response: The proposed fail safe system operated successfully for several years during earlier operation of the GETS, including operating at much higher PH3 concentrations than present, and I do not believe it would be prudent to make major adjustments to that system for operation under the Interim Work Plan.

Is EPA provided with information from the TMP eductor wash water characterization?

Response: FMC will have to characterize educator and other internal system wash water.

Provide details on the "conditioning" required for newly installed carbon.

If shutting off all TMP gas to the GETs system is required due to levels of PH3 from the tailgas > .2ppm, is required, a N2 purge should be required for a specified. time.

Response: I don't agree. The only reason for N2 purge is to extinguish a fire in the system. Operational history has shown that restart is much more problematic after an N2 purge, than after an air purge where the reaction in the carbon bed is allowed to go through to completion. If the excessive discharge is not related to high temperature indicating a fire in the system, air should be used for the purge after shutting off the TMP gas.

3.3.4 Operational Monitoring

Normal conditions 3 times per shift- define a shift- and do we want it at specified intervals?

Response: I agree that a shift should be defined, as well as the intervals.

Pond gas concentration are being calculated by a number of factors including the TMP gas at each outlet. Should we be asking to see the data from the TMP flows used to correct for scfm of source gas periodically? This would provide us information on which TMPs may be contributing the greatest variability or amount to source gas concentrations.

Response: I don't agree. TMP data relates to performance optimization only and not with any action or required levels per the UAO.

3.3.6 Planned GETS Operation at Pond 16s

Gas extraction at one or more of the Pond 16s perimeter pipe standpipes may be initiated using GES units in addition to or instead of GETS operation. If FMC want to use GES instead of GETS proper notification and approval should be obtained.

Response: I agree.

All perimeter pipe standpips PH3 concentrations should be decreased to 1000ppm before FMC ceases gas extraction. Reduction at TMPs should also be documented.

Response: I don't agree. The current UAO says they need to reduce concentrations to 2,000 ppm in perimeter standpipes. Reduction at TMPs is not addressed in the UAO.

3.4 Waste Management

The Tribes request EPA require FMC characterize spent carbon, condensate and other debris if non-routine operating conditions happened during the period this material was in use. Applying process knowledge to characterize waste materials during operation of non-routine conditions is not acceptable.

Response: I agree.

Maintenance Debris-

Provide notification where the material is disposed of- offsite or onsite and volumes

Response: I agree.

4.1 Monitoring Under the Air Monitoring Plan

Change .05 ppm of PH3 to .02 PPM PH3. Monitoring should never be reduced to annual while the GETS system is operating. Quarterly.

Response: I don't agree with requiring this change in the Interim Work Plan. They should follow procedures in the approved UAO Air Monitoring Plan and as proposed here as "interim." Longer term monitoring triggers and intervals are being addressed in the revised Post Closure Plan.

Low-lying areas should be monitored monthly during appurtenance monitoring.

Response: I don't agree with requiring this change in the Interim Work Plan. They should follow procedures in the approved UAO Air Monitoring Plan and as proposed here as "interim." Longer term monitoring triggers and intervals are being addressed in the revised Post Closure Plan.

4.2- GETS Area Monitoring

Define a shift? Is it always the same?

Response: I agree – "shift" should be defined.

4.2 Notification should be made if > .2ppm PH3

Response: I don't agree. Notification is currently required if they have any discharge above .3 ppm PH3.

Monitoring for PH3 during non-routine operations is the same as during routine operations for area monitoring? Should be increased- each monitoring point should be increased.

Response: I don't agree. The proposed monitoring is reasonable, particularly considering that each person is continuously monitoring via their personnel PH3 meter, and that non-routine operations involve a reduced flow-through of PH3 (shutting down of TMP gas input). Monitoring during opening of the carbon beds as specified is adequate.

The process of changing out the spent carbon vessel seems to be an accident waiting to happen. " the door will be partially unbolted and slightly opened to allow for measurement of PH3 within the door. If PH3 is measured within the door at a level of 0.3 ppm or higher, the door will immediately be sealed. Can EPA ask that a port of flange be installed to insert a probe for PH3 monitoring?

Response: I don't agree. Prior to opening the door, monitoring of downstream gas is being conducted, so there shouldn't be any surprises as they monitor while opening the door. This is how they operated the GETS successfully for over two years under the Pond 16S UAO.

The Tribes would like periodic monitoring of metal phosphides at this point or at the monitoring point after the condensate separator and before the blower into the carbon unit. We believe this is a reasonable request for characterization of this stream.

Response: I don't agree. Sampling for metal phosphides has been conducted and we found nothing above a level that would warrant additional characterization.

4.3 Only monitoring the north perimeter gas collection standpipe monthly? All standpipes should be monitored.

Response: I agree.

If FMC chooses to use an equivalent monitor for gas monitoring, as described in footnote on page 4-4 notification should be made prior.

Response: I agree – FMC should provide performance specifications for any “equivalent” monitor.

Please call me if you have any questions.

Greg Weigel
Federal On-Scene Coordinator
EPA Region 10, Emergency Response Unit
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208-867-3710 cell

From: Susan Hanson [<mailto:susanh@ida.net>]
Sent: Thursday, March 21, 2013 4:59 PM
To: Weigel, Greg; Kelly Wright
Cc: Virginia Monsisco
Subject: Re: Readily Implementable Interim Work Plans

Greg:

Shoshone-Bannock Tribes initial comments on Pond 16s Interim Work Plan Gas Extraction and Treatment- March 8, 2013

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----- Original Message -----

From: [Weigel, Greg](#)

To: [Susan Hanson](#); [Kelly Wright](#); brian.english@deg.idaho.gov

Sent: Monday, March 18, 2013 8:31 AM

Subject: RE: Readily Implementable Interim Work Plans

I just would like to be able to respond to FMC by end of this week.

Greg Weigel

Federal On-Scene Coordinator

EPA Region 10, Emergency Response Unit

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208-867-3710 cell